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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/617,837	07/14/2003	Cheng-Da Shaw	3313-0993P	7996
2292	7590	09/09/2004	EXAMINER	
BIRCH STEWART KOLASCH & BIRCH PO BOX 747 FALLS CHURCH, VA 22040-0747			THOMPSON, TIMOTHY J	
			ART UNIT	PAPER NUMBER
			2873	

DATE MAILED: 09/09/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/617,837

Applicant(s)

SHAW ET AL.

Examiner

Timothy J Thompson

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 4-16 is/are pending in the application.  
4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 4, 6-8, 11, 12 and 14-16 is/are rejected.
- 7) ☒ Claim(s) 5, 9, 10 and 13 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 14 July 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All b) ☐ Some \* c) ☒ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_.

## DETAILED ACTION

### *Claim Rejections - 35 USC § 103*

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 4, 6-8, 11, 12, 14-16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Jaing et al.(U.S. Pat. Pub 2001/0030789) in view of Deane(U.S. Patent No. 6,497,518).

Regarding claim 4, Jaing et al. discloses a base(fig 2, 205); at least one printed circuit board being installed on the base(fig 2, 106); at least one opto-electronic module electrically connected to the printed circuit board for emitting/receiving optical signals(fig 2, 110, 111), and a case covering and shielding the base, the opto-electronic module and the printed circuit board(fig 2, 119). Jiang et al. does not disclose a case covering and shielding around the base, the opto-electronic module and the printed circuit board. However, Deane discloses a case covering and shielding around the base, the opto-electronic module and the printed circuit board (fig 2, 110), additionally, coupling the sleeve to the semiconductor package stating that by coupling the sleeve to the semiconductor package dissipates heat through the exposed surface area of the sleeve as well as screening EMI. It would have been obvious to one skilled in the art, at the time of the invention, to form the case as a sleeve into which the base is received so as to cover the outside surface of the base as shown by Deane, in the optical transceiver

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of Jiang et al., since as shown by Deane, a case shaped as a sleeve into which the base is received so as to cover the outside surface of the base are commonly used with transceivers so as to dissipate heat as quickly as possible, since this maximizes the surface area of the base cover, as well as shield the EMI.

Regarding claim 6, Jaing et al. discloses the printed circuit board contains a plurality of pins(fig 2, 113).

Regarding claim 7, Jaing et al. discloses the case has openings for pins of the printed circuit board to stick out of the case and to form an electrical connection with the electronic device(the case inherently must have openings so that the pins protruding through the base can form an electrical connection).

Regarding claim 8, Jaing et al. discloses the base defines at least one fixing position for the printed circuit board installed thereon(fig 2, 240).

Regarding claim 11, Jaing et al. discloses the base has connector sockets(fig 2, 240).

Regarding claim 12, Jaing et al. discloses the case has four sidewalls parallel to a longitudinal axis of the base to form a sleeve shape.

5. (New) The packaging of claim 4, wherein the case has a sliding track and the base has a sliding groove, the sliding track and the sliding groove matching each other so that the base is combined with the case by sliding into it.

Regarding claim 14, Jaing et al. discloses the a plurality of electronic elements(fig 2, 110, 110).

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Regarding claim 15, Jaing et al. discloses a laser module(fig 2, 110).

Regarding claim 16, Jaing et al. discloses a receptacle and a detector(fig 2, 111, 213).

### ***Allowable Subject Matter***

Claims 5, 9, 10, 13 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims. The allowable features being; the case has a sliding track and the base has a sliding groove(claim 5); the base uses a central beam design(claim 9); the opto-electronic module connects the case directly(claim 10); the case has several holes on the sidewalls(claim 13).

### **Conclusion**

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

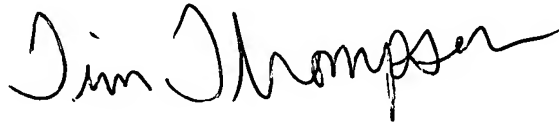
A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of

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the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Timothy J. Thompson whose telephone number is (571) 272-2342. If the examiner can not be reached his supervisor, Georgia Epps, can be reached on (571) 272-2328.

T.J.T.



8/25/04



Georgia Epps  
Supervisory Patent Examiner  
Technology Center 2800